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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,829	01/20/2006	Timo Saares	1503-0176PUS1	8880
2292 7590 12/28/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER				
AKRAM, IMRAN				
ART UNIT		PAPER NUMBER		
1795				
NOTIFICATION DATE		DELIVERY MODE		
12/28/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

### Office Action Summary

**Application No.**

10/532,829

**Applicant(s)**

SAARES, TIMO

**Examiner**

IMRAN AKRAM

**Art Unit**

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 1-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments filed 12/3/09 have been fully considered but they are not persuasive. The reference rejections still apply.
2. Applicant asserts that the amendment to the claims is not properly rejectable by the Rogers and Bohn references. Applicant states that the pegs of Bohn have varying heights and the slots are only a portion of a circle. To the first point: given the language of the amended claim 1, the fact that at least two pegs of Bohn are the same height has the reference read on the claim. And to the second point: new claim 14, to which it assumed the Applicant is referring when stating that the slots are only a portion of a circle, does not recite that the slots have to be a complete circle; only that they are substantially circular and ring-shaped.

***Claim Objections***

3. Claims 1-15 are objected to because of the following informalities: the last line of claim 1 recites, "wherein the pegs (6) extending upwardly into each of the substantially circular slots (9) has the same height." There appears to be a grammatical error. Either the pegs have the same height or each peg has the same height. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers (US 4,583,992) in view of Bohn (WO 87/06680).

7. Regarding claims 1, 2, 14, and 15, Rogers discloses a grate **50** for a gas generator **10** adapted to operate in the gasifier of the gas generator so as to provide support to solid fuel fed thereon for combustion such as wood chips, peat, bark and hog fuel from forest harvesting and the like refuse fuel fed thereon, the cross sections of the gasifier and thus also its grate being substantially circular in shape (see figure 2) comprising: substantially circular slots **52** formed in the grate, said substantially circular slots having the same center point but a varying radius (see figure 3), annular grate rings (not labeled, space between the slots) formed in the grate, said annular grate rings

being formed between the substantially circular slots, said annular gate ring being stationary with respect to the gasifier (when not being rotated); and the grate having placed thereon a mass of balls **54** with a diameter larger than the width of the grate slots, characterized in that below the grate is mounted a member **36** that is rotatable about the center axis of the grate (column 2, lines 64-68).

8. Rogers does not disclose projections extending upward through the circular grate slots. Bohn—in an invention for a gasifier—discloses the rotatable member is a rod-supported rake **46** and that the rake projections are rounded pegs **38** (see figure 3) extending upward from the rake rod so far that the tips of the pegs reach higher than the top surface of the grate ring slots **36** (see figure 2). The pegs are substantially the same height and at least two of the pegs on the same single rake have the same exact height (see figure 3). The tips of Bohn are "swept" in a horizontal direction (bottom of page 3 of translation) and since the grate slots of Bohn are substantially circular and similar in width and depth, this results in a rotating motion. The purpose of these pegs, as disclosed on page 1 of the translation, is to vibrate and shake up particles. It would have been obvious to one having ordinary skill in the art at the time of invention to add at least one rake with its pegs and the horizontally circular slots of Bohn to the circular grate openings of Rogers to break up particles in a rotating motion more effectively than the balls would do on their own.

9. Regarding claims 3 and 7, Rogers discloses that the grate rings are connected to each other by a support structure **68** that is situated above the top surface of the grate

and simultaneously provides two or more compartments of fixed shape for the balls (see figure 3).

10. Regarding claim 4, Rogers discloses that that the support structure **68** of the grate rings comprises two planar members orthogonally crossed with each other entirely across the gate so as to form four compartments for the balls (see figure 3), whereby the height of the planar members is selected to be greater than one and half times the ball diameter (see figure 1).

11. Regarding claims 5 and 8-10, Rogers discloses that that the balls are made from a ceramic material (column 3, lines 9-11).

12. Regarding claims 6 and 11-13, Rogers discloses that the rotating speed of the member **46** is adjustable (column 9, lines 33-42).

### ***Conclusion***

13. This is a RCE. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IMRAN AKRAM whose telephone number is (571)270-3241. The examiner can normally be reached on 10-7 Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on 571-272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Imran Akram/

Examiner, Art Unit 1795

/Jennifer K. Michener/

Supervisory Patent Examiner, Art Unit 1795